

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/611,534	· (07/01/2003	Luping Wang	ATMI-469-DIV	4731
25559	7590	06/17/2005		EXAMINER	
ATMI, IN	C.		LAWRENCE JR, FRANK M		
7 COMMERCE DRIVE DANBURY, CT 06810				ART UNIT	PAPER NUMBER
Dimboni, or work				1724	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			ℓ
		Application No.	Applicant(s) (
	Office Action Summary	10/611,534	WANG ET AL.
	Office Action Summary	Examiner	Art Unit
	The MAILING DATE of this communication	Frank M. Lawrence	1724
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the o	correspondence address
THE - Exte after - If the - If NC - Failt Any	MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reput of the provision of	136(a). In no event, however, may a reply be tirely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE.	nely filed /s will be considered timely. In the mailing date of this communication. D (35 U.S.C. § 133).
Status			
1)⊠	Responsive to communication(s) filed on 04 A	April 2005 and 20 May 2005.	
·		s action is non-final.	
3)	• •	•	•
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.
Disposit	ion of Claims		
5)⊠ 6)⊠	Claim(s) <u>19-27,51-53 and 57</u> is/are pending in 4a) Of the above claim(s) is/are withdra Claim(s) <u>22-27,51-53 and 57</u> is/are allowed. Claim(s) <u>19-21</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/	awn from consideration.	
Applicat	ion Papers		
9)□	The specification is objected to by the Examin	er.	
10)	The drawing(s) filed on is/are: a) ac	cepted or b) objected to by the	Examiner.
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E		* * * * * * * * * * * * * * * * * * * *
	under 35 U.S.C. § 119	Examinor. Note the attached Office	7.700001 01 1011111 1 1 0 - 132.
12)□ a)	Acknowledgment is made of a claim for foreig All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureassee the attached detailed Office action for a list	nts have been received. Its have been received in Applicat Onty documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachmer	nt(s)		
	ce of References Cited (PTO-892)	4) Interview Summary	
3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 er.No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-152)
.S. Patent and 1	rademark Office		

Art Unit: 1724

DETAILED ACTION

1. The indicated allowability of claim 20 is withdrawn in view of the newly discovered reference(s) to Harvey (4,224,068) and Murayama et al. (5,723,799). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Murayama et al. (5,723,799).
- 4. Murayama et al. '799 teach a method for producing a metal-based composite, comprising sintering metal-based ultrafine powders with an average grain size of about 20 nm to 100 nm to form a matrix. The metal powder can include nickel, cobalt, copper, iron or silver (col. 2, lines 33-50, col. 3, line 53 to col. 4, line 16).
- 5. Claims 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitt (3,972,726).
- 6. Schmitt '726 teaches a method for producing a porous metal containing matrix, comprising sintering a copper-coated nickel alloy powder having a grain size of less than 33 microns. A sintering temperature of 400° C is used in an example (col. 3, line 37 to col. 4, line 46).

Application/Control Number: 10/611,534 Page 3

Art Unit: 1724

7. Claims 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Harvey (4,224,068).

8. Harvey '068 teaches a method of making a metal matrix material comprising sintering copper powder with a mixture of silica and copper oxide powder having a largest dimension of as little as 1 micron. A sintering temperature of 925° C is used in an example (abstract, col. 1, line 66 to col. 2, line 31, col. 5, line 30 to col. 6, line 13).

Allowable Subject Matter

- 9. Claims 22-27, 51-53 and 56 are allowed.
- 10. The following is an examiner's statement of reasons for allowance: Reasons for allowance of the above claims are given in the previous office action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

Applicant's arguments, see the response, filed April 4, 2005, with respect to the rejection(s) of claim(s) 19 and 21 under 35 USC 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the Harvey and Murayama et al. patents. This rejection is NON-FINAL because it was not necessitated by an amendment.

Application/Control Number: 10/611,534

Art Unit: 1724

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence Primary Examiner Art Unit 1724 Page 4

 \mathbf{fl}

Frank Faurence 6-15-05